

AMENDMENTS TO THE DRAWINGS:

The Applicants respectfully present herewith replacement Fig. 1, which includes the desired changes, without markings, and which complies with 37 C.F.R. §1.84. The changes made to Fig. 1 are explained in the accompanying Remarks section below.

REMARKS

The Office Action mailed December 5, 2006 has been received and carefully considered. The above amendments and following remarks are submitted in response thereto.

Claims 1-5 have been amended and new claims 6 and 7 has been added. The amendments to the claims do not introduce new matter, since they contain only limitations that were already disclosed in the original application.

Information Disclosure Statement

The Office Action stated that the Information Disclosure Statement (IDS) filed on February 27, 2006, failed to comply with 37 C.F.R. § 1.98(a)(3) because a concise explanation of relevance was not provided for the non-English language patent DE 844569. The Office Action also stated that the IDS failed to comply with 37 C.F.R. § 1.98(a)(2) which requires legible copy of each cited foreign patent document because the copy of GB 520686 did not appear to be legible. The Applicants submit herewith, for the convenience of the Examiner, an English language translation of DE 844569 and a legible copy of GB 520,686.

The Examiner's attention is directed to MPEP 609 III which states that "where the information listed is not in the English language, but was cited in a search report or other action by a foreign patent office in a counterpart foreign application, the requirement for a concise explanation of relevance can be satisfied by submitting an English-language version of the search report or action which indicates the degree of relevance found by the foreign office. This may be an explanation of which portion of the reference is particularly relevant, to which claims it applies, or merely an "X", "Y", or "A" indication in a search report." An English-language copy of the International Search Report was filed with the Information Disclosure Statement dated February

27, 2006, receipt of which was acknowledged by the U.S. Patent and Trademark Office in the Notice of Acceptance of Application mailed August 18, 2006. The Applicants respectfully request consideration of these references.

Objection to the Drawings

Reference numeral 1a in Figure 1 has been changed to reference numeral 14. The reference numeral 14 indicates the control rods in Figure 1. Replacement sheet containing Figure 1 is attached to this paper.

Objections to the Specification and the Abstract

Throughout the Specification, all reference numerals "7a" which refer to the cam track have been deleted while all reference numerals "7a" which refer to the semicircular segment have been maintained.

The Abstract and Specification were objected to because the phrase, "in which there slide piston type dosing means" was unclear. The Applicants have amended the Abstract and the Specification to state: "in which in each cell is a sliding dosing piston".

Objection to the Claims

Claim 1 was objected to because the phrase, "in which there slide piston type dosing means" was unclear. The Applicants have amended claim 1 to recite: "in each cell is a sliding dosing piston". Accordingly, the applicants respectfully request withdrawal of the objection to claim 1.

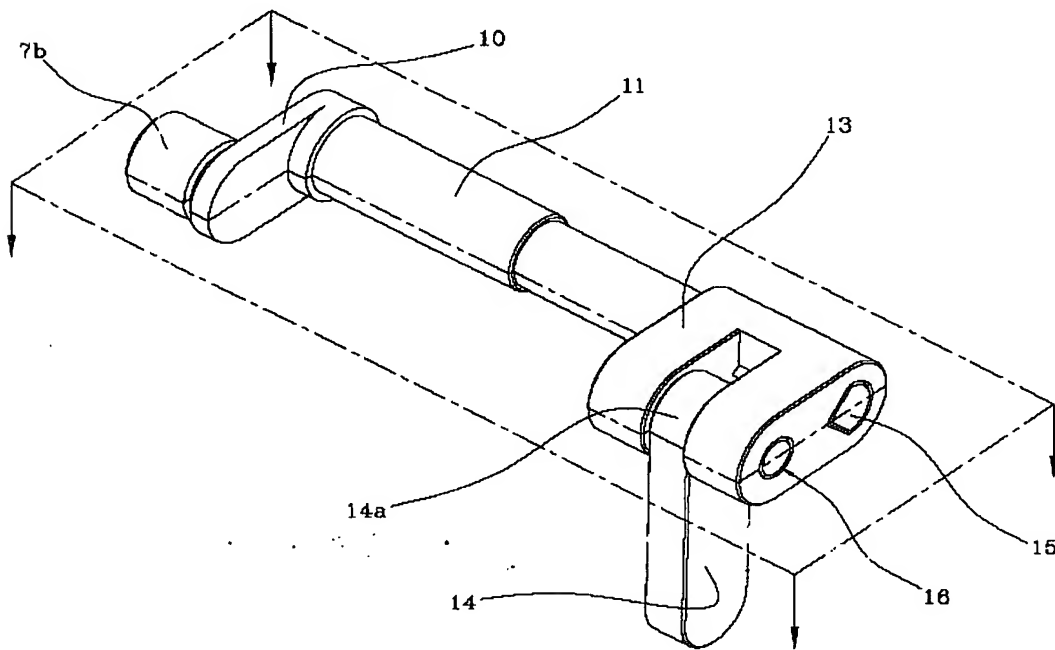
Claim Rejections - 35 U.S.C. §112

Claims 4 and 5 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The Applicants respectfully submit that, from "Merriam Webster" dictionary, a fork is an element which is divided into branches.

In order to put in evidence the meaning of the expression "fork-shaped" used in the present application, the following explanatory figure has been drawn:

This figure shows a perspective view of the crank mechanism, and in



particular it shows the cam follower 7b, the first crank 10, the shaft 11, the key 15, the second crank 13, the first end 14a of the connecting control rod 14 and the first pin 16. It is evident from the figure the "crankshaft" shape of the shaft.

The figure above appended identifies a plane (in dashed line) in respect of which the section view of Figure 4 of the application has been correctly drawn. The arrows indicate the direction of view corresponding to Figure 4 of the application.

Thus, from figure 4 of the application as filed, it is clear that the end of the second crank 13 is fork-shaped.

Claim Rejections - 35 U.S.C. § 102

Claims 1-5 were rejected under 35 U.S.C. §102(b) as being anticipated by Konig et al. (US 5,441,342).

As acknowledged in the Office Action, Konig et al. ('342) does not disclose the use of a web of filter material. The fact that the conveyor 40 would be capable of supporting a web for packaging purposes is not sufficient for asserting that Konig et al. (342) shows a web of "filter material".

Further, Konig et al. ('342) does not refer to dosing devices for feeding infusion products, but discloses an apparatus for kneading portioned dough pieces. In particular, the apparatus disclosed in Konig et al. ('342) is not a dosing apparatus, but rather it is an apparatus which is used for kneading and transferring portioned dough pieces. In fact, Konig et al. ('342) discloses that the apparatus carries out the steps of flouring the dough piece and giving the latter a round shape.

Consequently, Konig et al. ('342) does not show a hopper for containing an infusion product. In contrast, Konig et al. ('342) shows a hopper for containing and supplying dough. It is to be noted that a hopper for containing and supplying dough needs precise dimensional and shape requirements, since dough has a high viscosity, high density and high stick properties. It is therefore submitted that the hopper for containing and supplying dough has, for instance, very sloping (or vertical) internal surfaces which allow the dough to flow or move downwards. It would be also required that such a hopper be strong and equipped with means that rip up a portion of the dough mass, as the means referred to number 11 in Figure 1 of Konig et al. ('342). Such a hopper could not work if used for containing and supplying an infusion product, even if a packaging web would be used, since the features of a hopper for dough would not be compatible with an infusion product,

which is very light, has a reduced density and is incoherent and granular. Moreover, the aforementioned means 11 would not be able to be used for dosing an infusion products, since the incoherent property of the latter make it unsuitable to be dosed by said means 11.

Konig et al. ('342) does show a rotary drum having a plurality of radial cells (3, 4) which are designed to be used for transferring and kneading dough. These radial cells need to be strong and the respective pistons require a power supply which is high since they are used in treating dough, the latter having a high viscosity, high density and high stick properties. Such features render such radial cells (and the respective pistons) unable to be used for transferring and dosing an infusion product, which is incoherent and/or granular and very light.

For the above reasons, the pistons disclosed in Konig et al. ('342) are coupled to the respective radial cells in a way which can eject all the dough part from the radial cell at the deposit station (39). Since the dough tends to stick to the internal walls of the cells, the pistons need to be designed in such a way as to remove any part of the dough which would tend to remain into the cells, even generating a scraping action on the internal walls of the cells. An infusion product does not present such stick properties, and therefore the pistons and the radial cells disclosed in Konig et al. ('342) are deemed to be clearly different from cells and pistons designed for transferring and dosing an infusion product.

Moreover, the crank mechanism disclosed in Konig et al. ('342) is designed to be used in a drum, and to drive pistons, which are designed to transfer and knead dough and, as a result, said crank mechanism needs to be strong and linked to a high power source, due substantially to the high viscosity, the high density and the high stick properties of the dough which is treated. Such a crank mechanism is

therefore different from a crank mechanism designed to be used in an apparatus for transferring and dosing infusion products.

Furthermore, the crank mechanism which is shown in Konig et al. ('342) is not able to enable the pistons to move in a direction that is perfectly aligned with a longitudinal axis of the respective dosing cell. In fact, as can be seen in figure 2 of Konig et al. ('342), the crank 113 is eccentrically connected to the respective connecting rod 114 which drives the piston 43. Therefore, such an eccentric linkage would product a bending or flexion action on the connecting rod 114 with respect to a direction along which the latter translates. Such a bending action, when transmitted to the piston, would cause problems for the sliding motion of the piston, so leading to a teaching-away from the underlying technical problem of the present application.

In view of the above, it is therefore clear that Konig et al. ('342) does not anticipate present claim 1 of the application. Thus, it is respectfully requested that the rejection of claims 1-5 under 35 U.S.C. § 102 be withdrawn.

Claim Rejections - 35 U.S.C. §103

Claims 1-5 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Romagnoli (U.S. Patent No. 4,870,808) in view of Konig et al. (U.S. Patent No. 5,486,048). With regard to present claim 1, the Applicants respectfully submit that the technical field of Konig ('048) is different from the technical field of Romagnoli ('808), since the latter refers to volumetric dosing unit for producing filter sachets for infusion products while Konig et al. ('048) refers to kneading apparatus for dough pieces.

The Applicants respectfully submit that the crank mechanism disclosed by Konig et al. ('048) is designed to be used in a drum, and to drive pistons, which are designed to transfer and knead dough and, as a result, said crank mechanism must

be strong and linked to a high power source, due substantially to the high viscosity, the high density and the high stick properties of the dough which is treated. Such a crank mechanism is therefore different from a crank mechanism designed to be used in an apparatus for transferring and dosing infusion products.

As a result of the different properties between dough and infusion products, the production of filter sachets for infusion products involves technical problems and corresponding technical features which are different with respect to the kneading of dough pieces.

Therefore, one of ordinary skill in the art, starting from a rotary drum as the one described in Romagnoli ('808), would not consider Konig et al. ('048) for seeking a crank mechanism for the purpose of allowing radial movement of each piston in such a rotary drum.

Even if a crank mechanism as the one disclosed in Konig et al. ('048) would be combined with a rotary drum as the one disclosed in Romagnoli ('808), the resulting apparatus would not work, since the crank mechanism disclosed in Konig et al. ('048) is not designed to work in apparatuses for transferring and dosing infusion products, as much as the drum disclosed in Romagnoli ('808), referring to operate on infusion products, is not designed to support such a crank mechanism.

Thus, the combination of Konig et al. ('048) and Romagnoli ('808) fails to disclose a crank mechanism including a first and a second crank for moving the pistons in a radial direction, as asserted in the Office Action.

In view of the above, Konig et al. ('048) and Romagnoli ('808) either singly or in combination do not render claim 1 obvious. Accordingly, it is respectfully requested that the rejection of claim 1 under 35 U.S.C. §103 be withdrawn.

New Claim 7

New claim 7 recites similar features of claims 1-4 and new claim 6. Konig et al. ('342) does not disclose that the end of the second crank that is linked to the connecting rod is fork-shaped so as to hold the end of the connecting rod on both sides, and does not also disclose that the connecting rod is coupled with the second crank through a first pin that passes through a respective hole made in said fork-shaped end. In fact, as already cited, Konig et al. ('342) shows that the crank 113 is eccentrically connected to the respective connecting rod 114 which drives the piston 43, and such a connection between the crank 113 and connecting rod 114 does not comprise any fork-shaped ends. Moreover, such an eccentric linkage would product a bending or flexion action on the connecting rod 114 with respect to a direction along which the latter translates. Such a bending action, when transmitted to the piston, would cause problems for the sliding motion of the piston, so leading to a teaching-away from the underlying technical problem of the present application.

Further, with respect to the combination of Konig et al. ('048) and Romagnoli ('808), as discussed above, the combination fails to disclose a crank mechanism including a first and a second crank for moving the pistons in a radial direction. The combination also fails to disclose such fork-shaped end.

Since none of Konig et al. ('342), Romagnoli ('808) and Konig et al. ('048) disclose that the end of the second crank that is linked to the connecting rod is fork-shaped so as to hold the end of the connecting rod on both sides, new claim 7 is considered to be non-obvious over the prior art.

In view of the above, none of Konig et al. ('342) does not anticipate new claim 7 of the application. Further, Konig et al. ('048) and Romagnoli ('808), in combination, do not render new claim 7 obvious.

Conclusion

The Applicants respectfully submit that claims 1 and 7 are allowable. Claims 2-6 depend from claim 1. The Applicants further submit that each of these claims incorporate the patentable aspects thereof, and are therefore allowable for at least the same reasons as discussed above. Accordingly, the Applicants respectfully request withdrawal of the objections and rejections, allowance of claims 1-7 and the prompt issuance of a Notice of Allowability.

Should the Examiner believe anything further is desirable in order to place this application in better condition for allowance, the Examiner is requested to contact the undersigned at the telephone number listed below.

In the event this paper is not considered to be timely filed, the Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension, together with any additional fees that may be due with respect to this paper, may be charged to counsel's Deposit Account No. 01-2300, **referencing Attorney Dkt. No. 023349-00316.**

Respectfully submitted,



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RLB/wbp

Enclosures: Petition for Extension of Time (three months)
Replacement Sheet of Figure 1
English language translation of DE 844569
Copy of GB 520,686